

**Amendments to the Drawings:**

Please replace the drawing sheets bearing Figures 1, 4 and 5 with the drawing sheets attached in Appendix A.

The specific change which has been made to the drawing sheet containing Figure 1 is that the language “(Related Art)” is being added to the figure.

The specific changes which have been made to the drawing sheet containing Figures 4 and 5 constitute correction of the reference numbers as recommended in the Office Action.

**REMARKS**

The Office Action mailed on June 12, 2007, has been reviewed and the comments of the Patent and Trademark Office have been considered. Prior to this paper, claims 1-43 were pending, with claims 15-43 standing withdrawn. By this paper, Applicants do not add or cancel any claims. Therefore, claims 1-43 remain pending.

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

**Acknowledgement of References Cited**

With regard to the IDS submitted February 08, 2007, the Office Action states that KR 2001-0072835 was not considered, and the returned Form PTO/SB/08 indicates such.

Applicants submit that KR 2001-0072835 should be considered, because the IDS submitted on February 08, 2007, fully complies with the rules regarding foreign references to which a translation of even an abstract is not available.

Applicants respectfully request that the reference KR 2001-0072835, listed on the form submitted with the Information Disclosure Statement filed by Applicants on February 08, 2007, be initialed by an examiner and a copy of the form showing the initialization be provided to Applicants' agent. Additional copies of the Form PTO/SB/08 are enclosed for the PTO's convenience in Appendix B.

**Objections to the Drawings**

The drawings stand objected to as containing informalities. In response, Applicants hereby amend the drawings, as seen above, and request reconsideration in view of the amendments.

**Objections to the Specification**

The specification stands objected to as containing informalities. In response, Applicants hereby amend the specification, as seen above, and request reconsideration in view of the amendments.

**Rejections Under 35 U.S.C. § 102**

Claims 1, 2, 4-7, 9, 11, 13 and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Yoshida (EP 0858120). In response, Applicants traverse the rejection and respectfully submit that the above claims are allowable for at least the reasons that follow.

Applicants rely on MPEP § 2131, entitled “Anticipation – Application of 35 U.S.C. 102(a), (b), and (e),” which states that a “claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Section 103 amplifies the meaning of this anticipation standard by pointing out that anticipation requires that the claimed subject matter must be “*identically* disclosed or described” by the prior art reference. (Emphasis added.) It is respectfully submitted that Yoshida does not describe each and every element of independent claim 1 or independent claim 14, and thus no claim depending from these claims.

Claim 1 recites a secondary cell electrode which comprises “an electrode active material layer having a density gradient.” An exemplary embodiment of the present invention may be seen in Fig. 2, which depicts a nonaqueous electrolyte secondary cell 10 including an active material layer 12, in which, in a first depth zone 12a near a top surface of the layer, the concentration of solid active material 14a in electrolyte 15a is relatively small, and this concentration increases from zone 12a to zone 12c (see Fig. 2).

Yoshida does not teach, either expressly or inherently, the just-quoted feature of claim 1. The Examiner points to page 7, lines 34-38 of Yoshida as containing a teaching of the claimed gradient feature. Applicants disagree. All that Yoshida teaches is a density gradient of a polymer used in an exemplary cell. A density gradient of a polymer is not what is claimed in claim 1. Claim 1 recites an electrode **active material layer** having a density gradient. The varied distribution of the particulate polymer in the cell of Yoshida does not

constitute a corresponding feature which meets the stringent requirements of rejecting a claim as anticipated. At most, all that Yoshida teaches is a variation in the ratio of the active material in the whole cell of Yoshida. However, the macroscopic variation of active material from cell to cell is different than the microscopic density gradient of an active material layer within the same cell. Indeed, Yoshida specifically teaches that the polymer is introduced into voids in the cell (see page 7, lines 26-30). Accordingly, any active material in Yoshida cannot have a density gradient as claimed in claim 1. Thus, Yoshida fails to anticipate claim 1 for at least this reason.

Independent claim 14 is allowable for at least the pertinent reasons that make claim 1 allowable. The claims that depend either from claims 1 or 14 are not anticipated at least due to the allowability of the independent claims with respect to Yoshida. Reconsideration is requested.

#### **Rejections Under 35 U.S.C. § 103**

Claims 3, 8, 10, and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Yoshida in view of Tanjo (United States Patent Application Publication No. 2002/0028380). Applicants respectfully traverse the rejections as to the claims above, and submit that these claims are allowable for at least the following reasons.

Applicants rely on MPEP § 2143, which states that:

[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

It is respectfully submitted that at least the first and third criteria of MPEP § 2143 have not been met in the Office Action.

The Cited References Do Not Suggest All Claim Recitations

Even if the first requirement of MPEP § 2143 were to be considered satisfied in the Office Action (which it is not, as explained below), the cited references still do not meet the third requirement, which is that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.”

As detailed above, Yoshida fails to teach all of the features of claim 1. Yoshida also fails to suggest those features, and the Office Action does not assert the contrary. As Tanjo does not remedy the deficiencies of Yoshida with respect to MPEP §2143 (and the Office Action does not allege the contrary), the alleged combination of Yoshida and Tanjo fail to satisfy the third requirement of MPEP §2143. Accordingly, even if the first requirement of MPEP §2143 were to be considered satisfied, the third requirement of MPEP § 2143 is not satisfied in the Office Action, because the cited references do not teach each and every element of the present invention. Thus, the present claims are allowable.

Lack of Suggestion or Motivation to Modify or Combine the References

The motivation provided in the Office Action to modify Yoshida essentially relies solely on the Applicants’ disclosure, pointing to Tanjo to provide teachings of the various elements and then in hindsight reconstructing Yoshida to use those elements. That is, the Office Action asserts that Tanjo teaches the missing elements of Yoshida, and alleges that because those missing elements were taught in Tanjo, the skilled artisan would have modified Yoshida to include those teachings. Such an assertion is not sufficient to satisfy the first requirement of MPEP §2143, and, in fact, eviscerates that requirement.

Further, MPEP §2142, entitled “Legal Concept of *Prima Facie* Obviousness,” states that “impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.” Applicants provide a rationale for utilizing the elements recognized as missing from Yoshida. It appears that the Office Action is utilizing the Applicants’ own disclosure against them for motivation to modify the prior art. While it is permissible under certain circumstances to use teachings in the “background

section” of an application to teach missing elements of the prior art, it is impermissible to use Applicants’ application against them for motivation to combine or modify references.

In summary, because of the lack of suggestion or motivation in the prior art to modify the reference, the first requirement of MPEP § 2143 has not been met and, hence, a *prima facie* case of obviousness has not been established.

### **Rejoinder of Claims 8-11**

Claims 15-43 stand withdrawn. Applicants note that these claims depend either directly or ultimately from either of claims 1 or 14. Applicants respectfully request that these claims be rejoined and allowed due to their dependency from these claims – claims which are allowable. Applicants respectfully submit that no significant burden is placed on the PTO by rejoining and examining these claims. Indeed, such action is concomitant with the indication that “upon allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim.”

### **Conclusion**

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Examiner Wang is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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By 

FOLEY & LARDNER LLP  
Customer Number: 22428  
Telephone: (202) 295-4747  
Facsimile: (202) 672-5399

Martin J. Cosenza  
Attorney for Applicants  
Registration No. 48,892



## APPENDIX A



## APPENDIX B